



**FINAL**  
**Explanation of Significant Differences**  
**Operable Unit 4, Site 20**  
**Grit Blasting Area, Building 544**  
**Naval Weapons Station Earle,**  
**Colts Neck, New Jersey**

**INTRODUCTION AND**  
**STATEMENT OF PURPOSE**

This Explanation of Significant Differences (ESD) alters the remedy selected in the Record of Decision [ROD (Navy 1999)] for Operable Unit (OU) 4, Site 20 — Grit Blasting Area, Building 544 (the "Site"), at Naval Weapons Station Earle (NWS Earle) by removing the institutional land use control (LUC) and associated five-year reviews as they are no longer warranted due to New Jersey Department of Environmental Protection (NJDEP) soil standard changes.

Contaminant concentrations at the Site now meet the NJDEP revised Residential Direct Contact Soil Remediation Standards (RDCSRs) N.J.A.C 7:26D (NJDEP 2017) for beryllium.

The Navy is the lead agency and U.S. Environmental Protection Agency (EPA) and NJDEP serve as supporting agencies for hazardous substance release sites at NWS Earle being addressed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. §§9601-9675. The Navy and EPA are issuing this ESD for the Site consistent with the public participation requirements under Section 117(c) of CERCLA, Section 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 40 C.F.R. § 300.435(c)(2)(i), and the Navy Environmental Restoration Program. In accordance with 40 C.F.R. § 300.825(a)(2) of the NCP, this ESD will become part of the administrative record file for the facility. The administrative record file also

contains background information that was used in determining the original remedy, as documented in the ROD from September 28, 1999, and for this ESD. The administrative record file for NWS Earle is included in the Information Repository, which is available for review at the following location:

**Monmouth County Library – Eastern Branch**

1001 Route 35  
Shrewsbury, New Jersey 07702  
866-941-8188

**Hours of Availability:**

Monday — Thursday 9:00 am — 9:00 pm  
Friday and Saturday 9:00 am — 5:00 pm  
Sunday 1:00 pm — 5:00 pm

In addition, the administrative record can be accessed on-line at <http://go.usa.gov/kYQW>.

**SITE DESCRIPTION, CONTAMINANTS,**  
**AND SELECTED REMEDY**

**Site Description:** NWS Earle is located in Monmouth County, New Jersey, approximately 47 miles south of New York City. The station consists of two areas, the 10,248-acre Main Base (Mainside area), located inland, and the 706-acre Waterfront area (Figure 1). A Navy-controlled right-of-way containing a road and rail line connects the two base areas. The Navy commissioned the facility in 1943, and its primary mission is to supply ammunition to the Atlantic fleet.

The Site was used for grit blasting operations to remove paint from munitions. Spent grit and paint chips were disposed behind Building 544 in a pile which accumulated over an area approximately 10 feet in diameter and 1 foot high. In 2010, Building 544 was demolished and the Site is currently a grass covered open field and is no longer used for any active NWS Earle operations. A site layout map is included as Figure 2.

A remedial investigation was conducted in 1993 which identified select metals and semi-volatile compounds above the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC), the



unrestricted use unlimited exposure criteria applicable at the time of sampling. As a result, the Navy conducted a focused interim removal action via soil excavation and backfill with clean fill. The removal action was conducted in two stages and a total of approximately 300 cubic yards of contaminated material was excavated and disposed of offsite.

Two of the five post-removal action samples contained beryllium concentrations above its RDCSCC of 1 milligram per kilogram (mg/kg). The RDCSRS for beryllium, which replaced the RDCSCC, was increased to 16 mg/kg in 2008.

#### Contaminants:

- Soil — beryllium

<b>NJDEP RDCSCC (1996)</b>	<b>1 mg/kg</b>
<b>NJDEP RDCSRS (2017)</b>	<b>16 mg/kg</b>
<b>Maximum On-Site Beryllium Concentration</b>	<b>2.4 mg/kg</b>

NJDEP – New Jersey Department of Environmental Protection  
RDCSCC – Residential Direct Contact Soil Cleanup Criteria  
RDCSRS – Residential Direct Contact Soil Remediation Standards  
mg/kg – milligrams per kilogram

#### Selected Remedy:

The ROD documented that there was no unacceptable risk posed to human health or the environment under current or planned land use after the removal actions. However, since two of the five post-removal action samples exceeded the RDCSCC of 1996 of 1 mg/kg for beryllium for hypothetical future residential use, the selected remedy presented in the ROD required institutional controls in the form of a LUC to be annotated in the NWS Earle Base Master Plan (BMP) to restrict future residential use of the Site.

#### BASIS FOR THE DOCUMENT

Based on new toxicological data, the NJDEP promulgated RDCSRSs in 2008 which are unlimited use and unrestricted exposure (UU/UE) standards at a concentration of 16 mg/kg. The RDCSRSs were re-promulgated in 2012, 2015, and 2017. In all editions, the standard for beryllium has remained 16 mg/kg. The two post-excavation sample exceedances for beryllium are below the RDCSRS of 16 mg/kg.

A Technical Memorandum (Resolution Consultants, 2017) was developed to present an evaluation of beryllium at the Site. The Technical Memorandum demonstrated compliance with NJDEP RDCSRS and recommended that the LUC and associated five-year reviews were no longer required since the maximum concentration of beryllium of 2.4 mg/kg is below the RDCSRS. EPA and NJDEP provided review and concurrence with the Technical Memorandum on July 12, 2017 and August 21, 2017, respectively.

#### DESCRIPTION OF SIGNIFICANT DIFFERENCE

After review of documents and applicable or relevant and appropriate requirements (ARARs), it has been determined that soil at the Site does not contain any regulated compounds above ARARs.

The significant difference in this ESD is the removal of the requirement for the institutional control (LUC notation in the BMP). With approval of this ESD, the notation will be removed from the BMP and five-year reviews will no longer be conducted for the Site.

#### SUPPORT AGENCY COMMENTS

U.S. EPA and NJDEP representatives worked with the Navy in the decision-making process associated with the removal of the requirement for LUC at the Site. Both agencies agree that no unacceptable risk to human health and the environment is present and that the Site is compliant with ARARs.

#### STATUTORY DETERMINATIONS

The proposed changes to the selected remedy will continue to satisfy the statutory requirements of CERCLA Section 121. The remedy selected in the ROD, which included a LUC to prevent residential use, has been determined to no longer be warranted. The Site is compatible with unlimited use and unrestricted exposure. No unacceptable risk to human health or the environment is present and the Site is compliant with federal and state ARARs.

### **PUBLIC PARTICIPATION**

Public participation requirements of CERCLA Section 117(c) and Section 300.435(c)(2)(i) of the NCP have been met. The notice of availability of the ESD was published in the *Asbury Park Press* on [Day Month Year] and will be placed in the administrative record file in accordance with 40 C.F.R. §300.435(c)(2)(i).

### **FOR MORE INFORMATION**

If you have questions or would like further information about this ESD for Site 20 (OU 4) at NWS Earle, please contact:

Public Affairs Office, Naval Facilities  
Engineering Command Mid-Atlantic  
(NAVFAC Mid-Atlantic)  
9324 Virginia Ave. Rm. 302  
Norfolk, VA 23511-302  
E-mail: NAVFAC MS POA@navy.mil

### **DECLARATION**

The issuance of this ESD for Site 20 (OU 4) at NWS Earle is approved.

*United States Department of the Navy:*

  
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P. A. Fuller      13 Sept 18      Date  
Captain, U.S. Navy  
Commanding Officer

**DECLARATION**

The issuance of this ESD for Site 20 (OU 4) at NWS Earle is approved.

*United States Environmental Protection Agency:*



**Pat Evangelista**  
**Acting Director**  
**Superfund and Emergency**  
**Management Division**  
**U.S. EPA Region 2**

9/24/19

**Date**



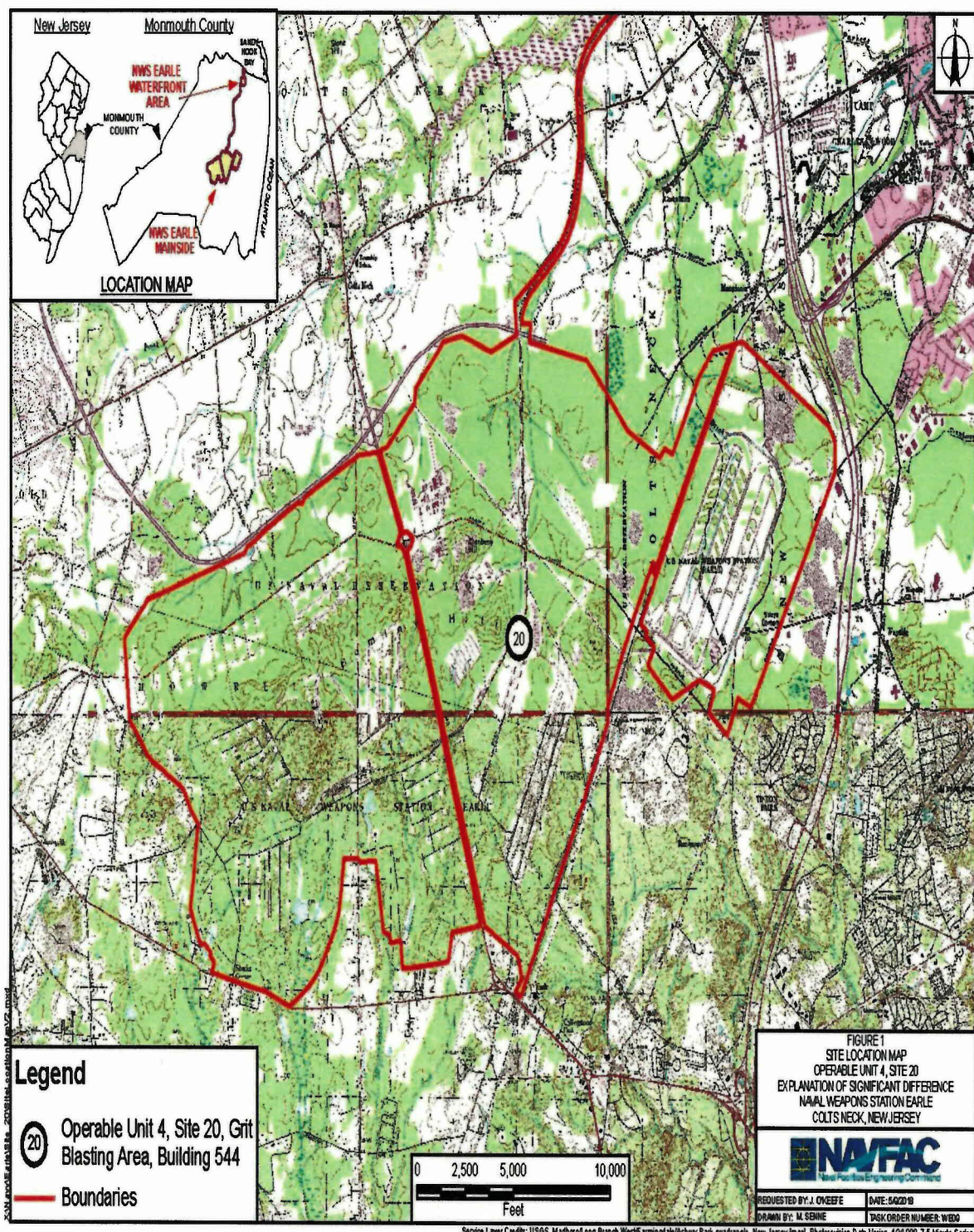


Figure 1 Site Location Map





Figure 2 Site Plan

